

8569

fom  
FOTO-MEM, INC.

2 Mercer Road  
Natick, Ma. 01760



*TISAR*

TOTAL INFORMATION STORAGE & RETRIEVAL SYSTEMS

The First Mass Central Data Bank  
capable of Storing and Retrieving  
All Forms of Information Instantly.



## System Definition

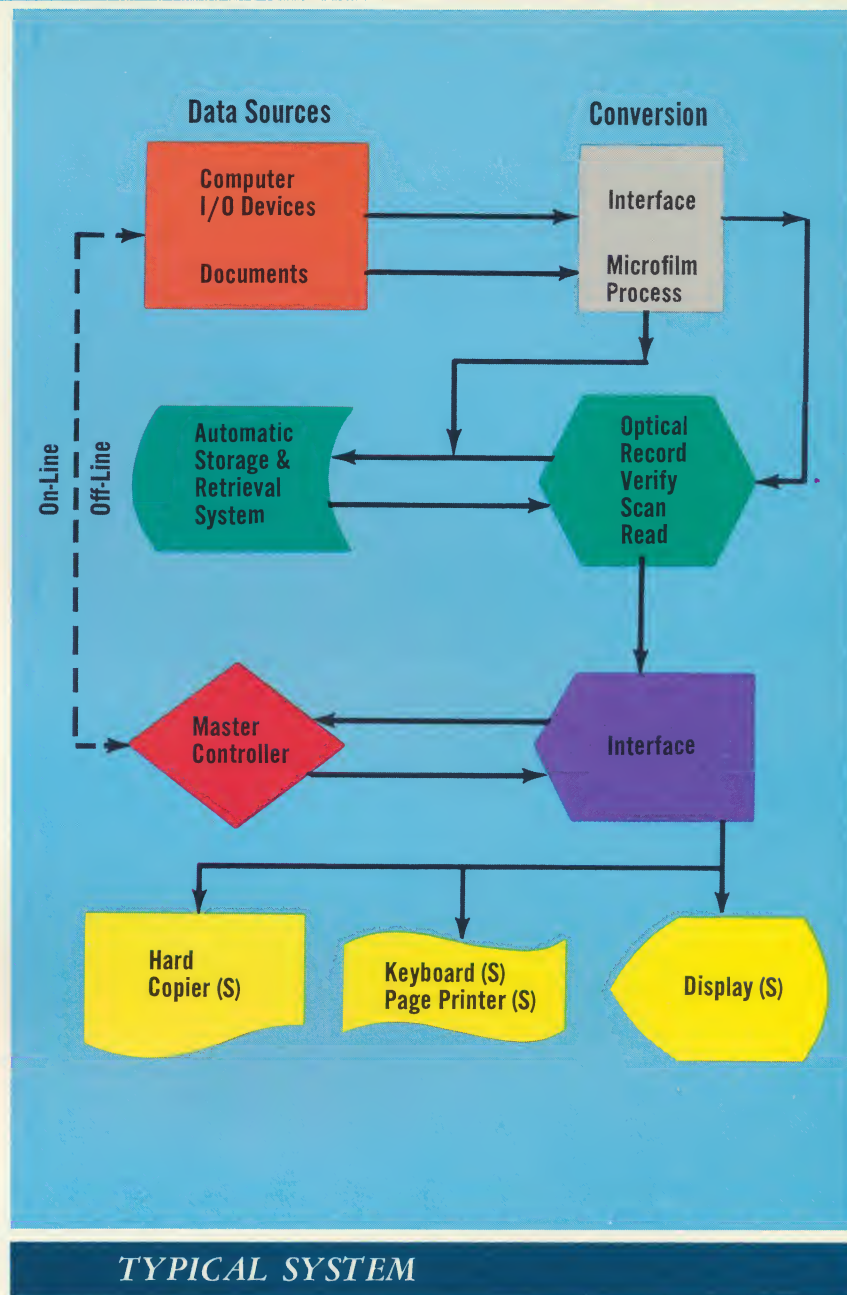
TISAR\* is a total information storage and retrieval system capable of handling pictorial, textual, audio, analog and digital information on microforms.

The system can be used on-line with your computer or off-line, operated by a keyboard. It need not take any more space than a desk, yet can store several million documents or over a trillion bits. In conjunction with the Foto-Mem "Data-Vision"\* Terminal, TISAR features instant filing and retrieving via visual monitors and keyboards, eliminating out of file problems, yet providing hard copy reproduction and permitting any number of people to interrogate the same file or any number of files.

If your company is involved in the information explosion, then TISAR can reduce your mountains of information into micro-data . . . retrievable instantly . . . when needed.

## Features

- ☐ Lower cost than tedious, time-consuming hand filing methods.
- ☐ Tremendous speed and complete automation.
- ☐ Easily updated storage media P.D.C. (Photo-Data Card).\*
- ☐ Capable of handling randomly or sequentially filed information.
- ☐ Limitless expansion with Modular System construction.
- ☐ Transmit, view and/or print all information.
- ☐ Eliminate out-of-file problems.
- ☐ Simultaneous, local and remote data input/output with keyboard page printers, viewers or displays — with no time restrictions.
- ☐ Human readable and machine readable information processing.
- ☐ Operates on-line with computer systems or self-operating off-line.
- ☐ Capable of man-machine communications with existing EDP installations.
- ☐ Digitally functions similar to magnetic tape, discs or drums as a random access memory to the computer.



**TYPICAL SYSTEM**

## Systems Concept

A total information storage and retrieval system, TISAR provides instantly accessible information in pictorial, graphic, audio, analog, and digital form on a single media, the Photo-Data-Card, utilizing the very latest electro-photo-optical techniques.

## Automatic Machine Retrieval

TISAR means rapid access, flexible application and compact storage of your present files whether they be paper documents, x-rays, plans, charts or even digital information. A requester can scrutinize any document, page by page, on his display console, review pages of printed material within moments after making a request, or interrogate the central processor and review and update displayed information at his desk console in the same building or even thousands of miles away via telephone communication lines. Many requesters can interrogate the same file or different files simultaneously, and where high priority is required for a particular user, a priority interrupt can be installed under complete control from the central storage area.





## Memory Bank

The Memory Bank is the heart of the TISAR. It is here that the selecting mechanism and writing and reading is accomplished, as well as where the Photo Data Cards\* (P.D.C.) are stored in the Foto-Data-Cells,\* (F.D.C.). Up to 100 P.D.C. are stored randomly in the Foto-Data-Cells, which are located in the selecting mechanism housing. Standard units house from one to 250 F.D.C., depending upon the requirements. This can be expanded to virtually an unlimited number of modules. Each F.D.C. can store up to 3 billion bits or 7,200 micro images of  $8\frac{1}{2} \times 11$  pages. An F.D.C. is approximately  $6'' \times 4'' \times 1\frac{1}{2}''$ . For special high density requirements, up to 100,000 micro images of  $8\frac{1}{2} \times 11$  pages can be stored in one F.D.C.\* Now 25 million pages of files can be stored and retrieved in an area about the size of an executive's desk.

\*Trade (Service) Mark

## Printers

For hard copy reproductions in single or multiple copies, a dry process video printer is furnished as part of the TISAR system. The printer will produce quality prints of pictorial, graphic, textural or alpha-numerically displayed digital information at a rate of approximately 6 pages per minute.

Inexpensive, non-impact printers, utilizing the same removable keyboard as provided with the Data Vision terminal, can be used with the TISAR system, permitting keyboard entry of information onto hard copy prints and directly into the TISAR system or computer system. Information from the system can be printed on hard copy at a rate of approximately 300 characters per second.

## Master Controller

This Master Controller directs inquiries from the various





**Data Vision Inquiry Terminal**



**Video Printer**

inquiry stations into the Storage and Retrieval units of the TISAR system, or the computer, and locates and directs the transmission of the desired information back to the inquirer in the form requested.

With the Controller, it is possible to create a journal of the activity of the file as well as indicate records requested for processing at the Central Storage and Retrieval Location.

### **Data File**

The Data File is a buffer memory which stores retrieved information for use by an inquirer, thereby freeing the main file to service other requests. This buffer permits a record of up to 800 pages to be stored for use at any one time, allowing an inquirer to scan a record for an unlimited time. TISAR, being modular, provides the capability of expanding the buffer to suit even larger requirements.

### **"Data Vision"\***

DATA VISION is a desk top monitor viewer with a detachable keyboard permitting freedom of operation and multiple use. With Data-Vision the inquirer has instant access directly to the computer or TISAR system providing visual display of pictorial, graphic, textural or alpha-numerically displayed digital information.

Data-Vision permits data to be entered on its full keyboard, and displayed on the monitor for verifying, editing, updating or erasing. Operation is silent and completely under the user's control without disrupting computer processing. At the push of a button all or any line of information can be sent to the computer for processing with instant visual retrieval of a solution. Data-Vision is easily operated, reduces paperwork and can be used as a remote time-share terminal to the TISAR system or your computer, permitting many inquirers to use the system simultaneously.

\*Trade (Service) Mark



## APPLICATIONS

A corporation's business is reflected in its filing system and many systems are mushrooming beyond reasonable bounds. Some companies must save all records; e.g. experimental and scientific records, governmental and corporate records. Other companies are able to dispose of records after several years. Each company being individual has its own requirements. TISAR recognizes and satisfies these variants.

TISAR serves the needs of insurance companies, utilities, federal, state, and local governmental agencies, hospitals, foundations, research laboratories, universities, libraries, engineering and technical oriented companies where records must be continuously maintained and meet the legality of the signature of the original document or meet the requirements of archival storage. TISAR also satisfies the needs of companies such as department or retail stores, as well as acts as a medium for catalog information or parts information for companies such as the automobile, aircraft or machinery manufacturers. TISAR provides for customer accounts' listing, a banking and accounting record memory, an educational tool and a computer random access memory.

TISAR saves space and time and eases manpower requirements.

## TYPICAL APPLICATION

By example let's say that the system will store the policy files of an insurance company. In the usual file cabinet, all papers related to a policy are placed together in an indexed file folder, and as time passes, new papers are added to the folder.

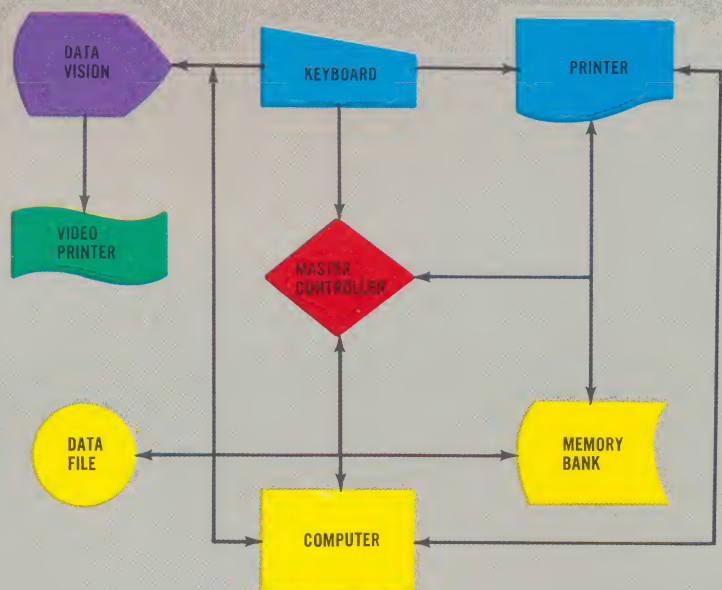
With TISAR, each paper, graph, x-ray, photo, etc. is recorded by a camera on a photo strip which has a segment of the Photo Data Card set aside for it.

The P.D.C. then becomes the folder and is machine indexed.

To retrieve a policy the interrogator merely types the number on his keyboard and the System locates the file by electronic command and sends the information in the file to a buffer memory, freeing the camera to answer other requests.

Now the interrogator can review the information on his display at his desk, at his leisure. If he needs a hard copy he presses a "copy" button and within seconds he has the prints. When he completes his work on that file, the images disappear.

During the entire process, which takes seconds, nothing is removed from the TISAR system and no manual labor is used to locate a file or refile. No file is out, even when many people are viewing the same file at various locations simultaneously. The process is silent, rapid and accurate.



## FOTO-MEM PRODUCTS FOR INFORMATION STORAGE-RETRIEVAL

Microfiche-Ultrafiche Viewers

Multiplex Viewer-Display Terminal  
Systems (Data-Vision Systems)

Photo-Optical Random Access Mass  
Memories

Automatic Microform Storage-Retrieval  
Systems

Microfiche Reproduction Systems

## ORDERING INFORMATION

When requesting a System proposal and price quotation or when placing an order, the following information should be provided.

1. Storage capacity required in number of bits and word length.
2. Exact model of computer or interface requirements.
3. Data transfer rate desired in bits or bytes per second (minimum and maximum).
4. Data input rate in bits or bytes per second (minimum and maximum).
5. Environmental requirements.
6. Space or weight limitations (if any).
7. Other: \_\_\_\_\_



FOTO-MEM INCORPORATED, 2 Mercer Road, Natick, Massachusetts 01760 (617) 655-4600



FIRST CLASS  
PERMIT NO. 10  
NATICK, MASS.

**BUSINESS REPLY MAIL**

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY:

FOTO-MEM, Inc.  
2 Mercer Road  
Natick, Mass. 01760

Please Fold and Staple Before Mailing

**ACTION REQUEST**

So that we may better fulfill your information requirements, please answer all the questions on the reverse of this postage-paid, business reply card. Thank You.

## ACTION REQUEST

In order to send you additional information on the TISAR SYSTEM we required the following facts about your operation:

1. What number of records are involved in your files? .....
2. What is the average number of pages per record? .....
3. What is the activity on a daily basis to your files — the number of files? .....
4. What is the number of updates on a daily basis:
  - a. New Issues? ..... pages
  - b. Random Updating? ..... pages
5. What will be the number of users (Terminals)? .....
6. Do you wish to tie the TISAR to your present computer?  
Yes.....No.....
  - a. If yes, what is your present computer?.....
  - b. Do you require digital storage? Yes.....No.....
  - c. What digital storage capacity is required,  
On-Line.....;  
Off-Line.....?
7. Do you require storage of documents other than 8 1/2" x 11"?

	<i>Types</i>	<i>Size</i>
<input type="checkbox"/>	X-Rays	.....
<input type="checkbox"/>	Plans	.....
<input type="checkbox"/>	Legal	.....
<input type="checkbox"/>	Other	.....

Do you have an ☐ immediate or  
☐ future Application?

My Name: .....

Title: .....

Company Name: .....

Address .....

Street

City

State

Zip

Tel.

Others in my company interested in TISAR information.

Name: .....

Title: .....

Name: .....

Title: .....

Call our Commercial Vice President, collect:  
(617) 235-3328